REMARKS

Claims 1-34 stand rejected under 35 U.S.C. 102(b) as being anticipated by Zittlau et al. (U.S. Patent No. 6,213,567). Applicant respectfully asks the Examiner to reconsider these rejections in view of the below Remarks.

The present invention is directed to an electronically controlled braking system intended for use with wheeled vehicles which incorporates distributed electronic control units, which allows for the control of each individual brake component or each group of brake components associated with each distributed electronic control unit independently of those associated with other distributed electronic control units, and which allows for control signals intended for controlling only one brake component or group of brake components to be differentiated from those control signals intended for controlling another brake component or group of brake components.

Applicant acknowledges (and acknowledged in the Background section of the present application) that these types of brake control systems are and have been known. Applicant also acknowledges that Ziiilau et al. discloses such a brake control system.

However, as discussed more fully in the Background section of the present application, at least one major problem exists with known brake control systems of this type, including the system disclosed in Zittlau et al. More specifically, known systems of this type generally involve the manual programming or setting of a unique identifier in the memory of each distributed electronic control unit, which identifier is indicative of the physical position of the brake component or group of brake components with which the distributed electronic control unit is associated. In these systems, each of the control signals generated by the central control unit includes an indication of the identifier of the distributed control unit for which that control signal is intended. When each distributed electronic control unit receives the control signals, it determines, based upon the identifier contained in each control signal, whether that particular control signal is intended for it, and if so, responds accordingly. If that particular control signal is not intended for it, the control signal is ignored.

The present invention obviates this problem by having the central control unit itself assign identifiers to the distributed electronic control units based at least in part upon the timing of a signal reaching each of the distributed electronic control units. More specifically, all apparatus claims require, among other elements: (i) a central control unit operable to assign identifiers during an identifier assignment routine, and (ii) wherein one identifier is assigned to a first distributed

electronic control unit and another identifier is assigned to a second distributed electronic control unit at least in part based upon the timing of a signal reaching the first and second distributed electronic control units. Similarly, all method claims of the present application require, among other elements, the steps of: (i) transmitting a signal to first and second distributed electronic control units, and (ii) assigning an identifier to the first distributed electronic control unit and assigning another identifier to the second distributed electronic control unit at least in part based upon the timing of the signal reaching the first and second distributed electronic control units.

Applicant respectfully submits that the above-highlighted elements are not disclosed, taught or suggested in any way by Zittlau et al. Zittlau et al. is directed to a system which employs the well-known technique of allotting time periods (i.e., time slices) to each brake component in which that brake component is allowed to communicate with (i.e., is allowed to send data to and receive data from) the central controller. For example, suppose in an extremely simple example, there are two brake components having addresses of BC1 and BC2. Each control cycle may be 3 seconds long (of course, in practice this time period would be much shorter). The first second of each cycle may be allotted to communications between the central controller and the first brake component BC1, the second second of each cycle may be allotted to communications between the central

controller and the second brake component BC2, and the third second of each cycle may be allotted to no communication. Thus, each of brake components BC1 and BC2 "knows" that a command is directed to it based upon when in the cycle (i.e., in which second of the cycle) that command is received.

Further redundancy may be provided in such systems if the command data blocks further specify the address (i.e., either BC1 or BC2) of the brake component for which the command is intended. Now, for example, brake component BC1 "knows" that a command data block is intended for it if (1) it is received within the first second of the cycle, and (2) it includes the address BC1. In this way, communications errors can be minimized.

While Zittlau et al. is directed to such a system which allots designated time periods for communications with certain brake components, there is no disclosure, teaching or suggestion whatsoever as to how the "address" for each brake component is assigned. As such, Applicant assumes that addresses are assigned according to the known prior art techniques described in the background section of the present application -- that is, by manual programming or setting of a unique identifier in the memory of each distributed electronic control unit. Therefore,

Zittlau et al. would suffer from those disadvantages of such systems discussed in the Background section of the present application.

For the foregoing reasons, Applicant respectfully submits that all pending claims, namely Claims 1-34, are patentable over the references of record, and earnestly solicits allowance of the same.

Respectfully submitted,

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Amendments to the Drawings:

No amendments are made to the Drawings herein.